CLAIMS

1. A process for purifying human interferon beta from a recombinant human interferon beta-containing culture comprising performing affinity chromatography and reversed-phase high-performance liquid chromatography (RP-HPLC),

wherein the affinity chromatography comprises:

adsorbing the interferon beta-containing culture to an equilibrated affinity chromatography column, followed by washing with an equilibration buffer solution;

washing the column with a washing buffer solution A of pH 6.5-7.5 containing 30-60 wt% of propylene glycol and a washing buffer solution B of pH 6.5-7.5 containing 10-30 wt% of propylene glycol and 1-2M NaCl; and

eluting a human interferon beta-containing fraction with a buffer solution of pH 6.5-7.5 containing 40-60 wt% of propylene glycol and 1-2M NaCl.

2. The process of claim 1, wherein the washing step further comprises washing the column with a washing buffer solution C of pH 6.5-7.5 containing 1-2M NaCl.

3. The process of claim 1 or 2, wherein each buffer solution used in the washing and the elution is a sodium phosphate buffer solution or a potassium phosphate buffer solution.

4. The process of claim 1 or 2, wherein a solution obtained by the affinity chromatography is subjected to diafiltration with an ultrafiltration membrane of molecular weight cut-off of 10,000 before the RP-HPLC.

5. The process of claim 4, wherein in the RP-HPLC, a sample obtained by the diafiltration is loaded on a column and then a human interferon beta-containing fraction is eluted at pH 2-5 by a concentration gradient of ethanol containing HCl.